

Joint Experimentation

By THOMAS M. COOKE

oint experimentation has reached a juncture. U.S. Joint Forces Command (JFCOM) is the focal point for joint experimentation Vision 2020. While the command has embraced these tasks as its preeminent mission, it remains hamstrung by internal reluctance to think outside the box and pursue authentic experimental issues. Its efforts remain tied to current operational paradigms and demonstrate an incremental rather than revolutionary approach to anticipating requirements. Moreover, JFCOM is competing with CINCs who conduct their own experiments, which are primarily service-oriented

and implementing concepts found in Joint

but may have joint applicability. The result is a fragmented effort not necessarily oriented on joint requirements. This uncoordinated venture must be streamlined and consolidated under a single organization. JFCOM is best suited for this mission. It should exercise proprietary ownership of joint experiments and develop joint doctrine. If it does not, the command could find itself irrelevant and the military could lose its last and best hope for dramatic advances in operational art.

Command without a Plan

The unified command plan (UCP) in 1993 called for forces in the continental United States to be merged "into a combatant command whose principal purpose will be to ensure joint training and joint readiness of our response forces." The result was the establishment of U.S. Atlantic Command (ACOM), which had its role

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Light armored vehicles arriving at Fort Lewis.

expanded further in 1997 to develop strategy that would "maximize America's military capability through joint training, force integration and deployment of ready U.S.-based forces to support forward commanders in chief (CINCs), the Atlantic Theater, and domestic requirements." ACOM was assigned primacy over three major missions: joint force trainer, integrator, and provider. Two years later, UCP realigned ACOM (and also redesignated it as JFCOM) with responsibilities for homeland defense and military support to civil operations.

JFCOM thereby remained a four-star organization but fell short of justifying its status as a warfighting command. Therein lies the rub. With-

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out a clear threat or geographic responsibilities, the command seemed relegated to a secondary position. There are few scenarios in which it would direct combat forces. In

addition, Title 10 responsibilities mandate that each CINC train (and equip through the services) its forces to support regional operations, giving JFCOM a supporting role rather than a combatant command in its own right. The challenge was to obtain a mission uniquely its own. The Joint Chiefs provided one—joint experimentation.

While other joint commands perform experimentation in their areas of responsibility, only JFCOM is mandated to support this task. In that

regard, the command has made great strides. It built on its legacy and resourced a joint experimentation (J-9) staff to specifically direct the effort. This staff element also serves as commander of the Joint Futures Lab.

The joint experimentation charter is unambiguous. JFCOM is designated "DOD executive agent, and functionally responsible to the [Chairman], for joint experimentation." This effectively places all joint experimentation firmly in its command charter. To cement the function, the *Defense Authorization Report* defined this charter as "exploring the most critical warfighting challenges at the operational level of war which will confront U.S. joint military forces."

The key to joint experimentation is *Joint Vision 2020*, which calls for the Armed Forces to concentrate on full spectrum dominance—that is, to supporting the military capability to perform missions from peacekeeping to conflict deterrence/prevention to fighting and winning against fully capable enemies. The vision laid the groundwork by focusing the services on accomplishing these tasks with superior technology, information superiority, improved jointness, precision operations, dominant maneuver, focused logistics, and full-dimensional protection.

The Joint Futures Lab forecasts joint capabilities over the next ten to fifteen years and also determines whether those capabilities back the goals of *JV 2020*. Every experiment is designed to support assessments of future capabilities with an eye on modifying current doctrine, organization, training, matériel, leadership, and procedures. These are daunting tasks with no precedent to either design a plan or gauge success.

As a point of departure the lab identified joint concepts to guide experiments on anticipated capabilities: rapid decisive operations, common relevant operational picture, and interactive plans. The concepts were chosen in part because actual operations revealed them as areas which required further work. They also represent what many consider the most difficult tasks in modern warfare. The lab experiments are built on a worst case warfighting scenario and support the premise that if units can perform general warfare missions they are likely to be able to perform all other missions.

Flawed from the Start

Unfortunately, JFCOM concepts do not demonstrate novel thinking but are based on tried-and-true notions that, while requiring reconfiguration or adjustment, are neither revolutionary nor experimental in basic concept. For example, rapid decisive operations is founded on the premise of "getting there the fastest with the mostest" and exacting as much effect on an

enemy as quickly as possible with the minimum expenditure of ordnance and supplies. It is a legacy of Desert Shield based on the realization that future strategic lift will be insufficient to move forces and matériel such as was employed in the Persian Gulf War. In a future scenario, the United States may not have the luxury of moving echelons-above-corps level troops, tanks/armored personnel carriers, artillery, air defense, or the logistical tail associated with each.

The key enabler of rapid decisive operations is knowledge. The prime vehicle for gaining superior knowledge is operational net assessment, envisioned as a continuously updated system analysis of total enemy warmaking capability. It would provide a pre-crisis understanding to facilitate planning focused on combat effects designed to erode



leadership will and capabilities. This effects-based planning would allow Desert Storm effectiveness with fewer combat systems.

The above hypothesis holds that the judicious employment of disparate service assets will provide synergy to achieve sufficient lethality in the battlespace. This force could include a collage of such combat elements as redesigned ground forces, more lethal helicopters, stealth fighters and bombers, reconnaissance craft, carriers, Aegis cruisers, and attack submarines. By organizing and deploying specific combat systems into theater, less lift would be required for the same result.

The problem with experimentation is that it only rarely considers revolutionary concepts. JFCOM usually leverages assets already involved in CINC exercises and service experiments and overlays a strategic and operational scenario, inside which the lab does testing. Typically exercises do not support experiments geared toward more asymmetric or information operations

themes—the concepts that would make rapid decisive operations genuinely experimental. Because the exercises usually stress traditional operational practices, asymmetric threats, alternative methods of conflict deterrence, and support to peace operations are relegated to secondary importance.

The common relevant operational picture improves shared battlespace awareness by giving commanders and staffs timely and tailored information through digital displays. Behind each icon would reside a hyperlink to a virtual warehouse of associated data for consumers. This concept would also provide information to consumers based on previously identified requirements through established profiles. Such a system no doubt has application, but is not a new concept. Air traffic controller displays, basic Internet surfing, and automated message handling systems are all examples, as are the legacy systems in use throughout the Armed Forces. It makes little sense to invest in new experimentation on proven capabilities.

Likewise, joint interactive planning in which multiple organizations can meet in a virtual environment has been around for years. At present, IFCOM is involved in providing a venue for testing several collaborative tools under simulated field conditions. But the crucial aspects of joint interactive planning are not being addressed by experimentation. While the benefits of multi-tiered collaboration may appear obvious, a case can be made against such collaboration. The Vietnam War witnessed helicopters being stacked one above the other, each with a more senior commander directing operations on the ground, illustrating the negatives of collaboration, which some call micromanagement. Indeed, basic leadership requires a commander to provide clear guidance and allow subordinates latitude to perform the task. In sum, the current concept is primarily a joint application of a traditional tactical level debate that deals more with command style and theory than technology and operational art.

The principal challenge is the lack of resources for a vigorous experimentation program. While JFCOM proudly claims "the future is our AOR," it is continually pulled back to the present by operational reality. Because it cannot build and execute a joint warfighting experiment, it must rely on other assets that are heavily involved in planning, training, and perhaps executing current operational plans and doctrine. UCP provides the authority to leverage service experiments and, by extension, the joint training thereof, in support of the "most critical warfighting challenges." In reality experimental objectives



are often at variance with operational requirements—operations each warfighting CINC must be prepared to execute. As a consequence, training requirements achieve primacy over experimental goals, with results gained more through serendipity than design.

Clearly, each warfighting command must retain the authority to experiment with forces and train staffs in a manner consistent with its regional focus and contingency plans. Indeed, the

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joint strategic capabilities plan requires CINCs to use adaptive planning principles to develop a menu of options from all to nothing

in their operation plans for regional contingencies, including flexible deterrent, deploy-decisive force, and counterattack. It is unfair to expect combatant commanders to invest precious training time in support of experimental concepts that may not support warfighting missions. A balance between training and experimentation must be met, but that implies that each side is an equal partner. Part of the solution is getting both CINCs and services out of the joint experimentation business and focusing all effort on JFCOM.

Going Deep

Rather than concentrating on operational activities in which every CINC has extensive and mature mission essential tasks, JFCOM should focus on areas where little joint doctrine exists and where assessments reveal that forces are most likely to be employed. Doctrine ensures appropriate interoperability and compatibility in combining disparate organizations with differing

applications of operational art. The joint experimentation role could augment combatant commander readiness by conducting interoperability experiments, while CINCs focus on general warfighting techniques in support of potential regional conflicts.

JFCOM must apply its talents to helping CINCs with nontraditional roles that cross service and command boundaries, conducting experiments with an eye on the future, as regional CINCs continue to deal with the here and now, using legacy systems and approved contingency plans. The command should apply current lessons from the regional efforts and the lessons learned from real world contingencies with a focus on the distant future.

Assigning joint experimentation to one command is risky. Nontraditional thinking means overcoming the conventional wisdom, much of which directly affects individual services or CINCs. This is where the command must be assertive. JFCOM must make joint experimentation a mantra, and the Pentagon leadership must support it. There must be a modification to Title 10 requirements that ensures JFCOM can garner assets to conduct experiments that are revolutionary in concept and design. Moreover, the services must accept the command as the only venue for testing capabilities in a genuinely joint environment. Insulated from service parochialism and the regional CINCs, the command could tackle this mission.

On the other hand, JFCOM must guard against overselling its capabilities and also control expectations. Congress is keen on getting it right and supports the Joint Futures Lab as the way to plan technology acquisition on the drawing boards. But if lab experiments produce little more than marginal improvements and other CINCs continue to conduct similar experiments without more funding, Congress might withdraw additional money and disband the entire effort. JFCOM must prove that its experiments are unique and will result in significant applications or risk losing joint experimentation in a future UCP revision.

JFCOM must think in innovative ways, focusing less on the present by looking more to the future. But without sole propriety for a primary task, the command risks further mission erosion. It offers the Nation the best opportunity to strengthen national defense by joint experimentation. If the JFCOM area of responsibility is truly the future, the command needs to show the fortitude to leap into the unknown.